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File 348:EUROPEAN PATENTS 1978-2001/Jun W04

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Set	Items	Description
S1	440621	DOCUMENT? OR CHECK? ? OR CHEQUE? ? OR INSTRUMENT? OR MONET- ARY()TRANSACTION? OR MONEY()ORDER?
S2	559	S1(5N) (ATM OR (TELLER? OR TRANSACTION? OR BANK?) () (MACHINE? OR TERMINAL?) OR KIOSK?)
S3	45	S2(5N).(CASH OR CASHES OR CASHING OR CASHED)
S4	45	S3 AND (REMIT? OR DEPOSIT? OR DISPENS? OR TRANSFER? OR WIRE OR MONEY()ORDER? OR TOUCHSCREEN? OR TOUCH()SCREEN?)
S5	43	S3 AND (SIGNATURE? OR ENDORS? OR SIGNED OR BIOMETRIC? OR I- RIS? OR RETINA? OR FINGER()PRINT? OR FINGERPRINT? OR VOICE OR FACIAL OR FACE OR HAND)
S6	53	S2 AND (BILL OR BILLS) (2N) (PAY? OR PAID OR PAYMENT)
S7	81	S2 AND (CAR OR COURTESY())AMOUNT()RECOGNI? OR LAR OR LEGAL(-)AMOUNT()RECOGNI? OR MICR OR CHARACTER()RECOGNI? OR OCR)
S8	22850	(IMAGE OR IMAGES) (5N) (VALID? OR VERIFY? OR EVALUAT? OR S- UBSTANTIAT? OR CONFIRM? OR AUTHENTIC? OR ANALYS? OR ANALYZ? OR ANALYT?)
S9	45	S3 OR S4
S10	45	S9 OR S5
S11	17	S10 AND (S7 OR S8)
S12	17	S11(S) (S7-S8)

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12/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01281123

Method, system, and apparatus for providing secure interactive services through an unattended modular kiosk

Verfahren, System und Vorrichtung zum Leisten von gesicherten interaktiven Diensten mittels eines nicht-überwachten modularen Kiosks

Methode, systeme et appareil pour fournir des services interactifs securises a l'aide d'un kiosque modulaire sans supervision

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PATENT (CC, No, Kind, Date): EP 1102222 A2 010523 (Basic)
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SPEC A	(English)	200121	4342
Total word count - document A			4904
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Total word count - documents A + B			4904

INVENTOR:

Rizzo, Carol J...

...SPECIFICATION is able to verify deposit amounts, print check amounts with ink designed for Magnetic Ink Character Recognition (MICR), print **endorsements**, and accept envelop **deposits**. This sidecar module is configured in either a right **hand** or left **hand** configuration with respect to the central multimedia module.

B. Cash/Envelope Depository module embodiment. This...2, the optional left and right sidecar modules 2a and 2b, respectively, include a media **dispensing** device 10 and a media **depository** device 11. An embodiment of the sidecar modules 2a, 2b incorporates the media **dispensing** device 10 as the optional component and the media **depository** device 11 as a main component of the sidecar modules 2a, 2b. One embodiment includes a media **depository** device 11 that performs as a check imaging/envelope **depository** device. This device lifts the images on both sides of a check

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with, for example, 300 DPI resolution; and utilizes both Computer-Assisted Retrieval Systems: (CAR) and CAV to verify the **deposit** amount. The device in this embodiment prints the check amount on the front of the check with **MICR** ink and prints the **endorsement** on the back of the check, with, for example, an inkjet. The device reads by **MICR /OCR** all formats E-13A/B, CMC-7. Furthermore, the media **depository** device 11 in this embodiment accepts up to a quarter inch thick envelope with one envelope bin and three check bins. Embodiments of the media **dispensing** device 10 includes an airline ticket printer, coupon/tickets printer, and/or cards issuance device...

...check, deposited envelope, or document. The imaging of the check occurs, for example, when a **check** is **cashed** at the **kiosk**. Additional features provided on additional embodiments include **deposit** amount verification, check amount printing, and **endorsement** printing.

The media dispensing device 10 of an embodiment of an optional sidecar module 2...further includes supplying a lower main component cabinet for housing the check imaging and envelop **depository** unit for verifying **deposit** amounts, printing check amounts with **MICR** ink, printing **endorsements**, and accepting envelop **deposits**.

The method also comprises the step of adding to an optional sidecar module 2 an...

12/3,K/2 (Item 2 from file: 348)
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01125963

System and method for image depositing, image presentment and deposit taking in a commercial environment
System und Verfahren zur Bildablage, Bilddarstellung und Vornehmen von Einzahlungen in einem kommerziellen Umgebung
Systeme et methode pour le depot d'images, la presentation d'images et la reception de depots dans un environnement commercial

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PATENT (CC, No, Kind, Date): EP 984410 A1 000308 (Basic)
APPLICATION (CC, No, Date): EP 99202212 990707;

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EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
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...SPECIFICATION particular to a method and system for accepting, canceling, copying, transmitting, and creating Magnetic Image **Character Recognition (MICR)** encoded paper facsimiles of the checks, and verifying checks in an electronic manner that allows...

...or minimal paper use processing.

In this context, the banking and the automatic teller machine (**ATM**) manufacturing industry has experimented with **check** image systems for a number of years with little success. Some of the reasons for...

...customer experience, as well as the failure to address the entire system, i.e., the **depositing** customer, the check payment system, the paying bank and the customer who wrote the check...

...of the prior art, check imaging systems are avoided and a comprehensive system for imaging **depositing**, presentment and **deposit** taking in a commercial environment is provided. In part, this is possible because of existing...

...time for images available for ATM installation, and better image compression and Courtesy Account Recognition (**CAR**) software, all of which are commercially available, and which are implemented in the invention in...

...is thus one object of the invention to provide a method and system to image **check** items at an **ATM**, collect **MICR** code line and other information about the check and **deposit** account, and transmit the image and data directly to an image capable for processing. Because...

...the problems of the prior art by providing a method and system for copying and **transferring** checks electronically and then creating an **MICR** encoded paper facsimile of the check or using another paperless method to enter the check...

...recreated into a paper form resembling the original paper check, and the paper form is **MICR** encoded. In another embodiment, paperless transactions for checks is accomplished, and variability between paper and...

...as an automatic teller machine (**ATM**), a customer access terminal (**CAT**), or other check scanning **depository** terminal connected to a network. The same can be done with cash.

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Yet still another...

...check, and transmitting the scanned check electronically to a central location of one bank, accepting **deposits** at merchant locations, accepting **deposits** of one bank for another, and accepting transactions and checks from places like brokerage offices...recreated into a paper form resembling the original paper check, and the paper form is **MICR** encoded. While the invention is generally described in terms of being implemented with instruments such...

...which is more generally illustrated in Fig. 1;

Figure 3 is a block diagram illustrating **MICR** encoded facsimile presentment;

Figure 4 is a block diagram illustrating local scanned image presentment to...

...at the back office check processing center.

Figure 11 illustrates an original check and an **MICR** image.

Detailed Discussion of the Invention

A general system overview of the invention is shown...

...ordinary skill in the art.

The CAT can be programmed to validate check items through **MICR** code line and **OCR** software. When a check is scanned in, an image of each check is presented on the customer display. The customer can then, using an appropriate keyboard and **Courtesy Amount Recognition Software (CAR)**, input the check amount. A comparison between the scanned amount and the entered amount is...

...if there is a match, the transaction proceeds. If the customer's input and the **courtesy amount recognition** differ, even after a customer's second input, the system will send the check image...

...record with an image of selected elements of the check. The CAT 101 then compiles **deposit** information such as the **deposit** account number, check courtesy amount, **MICR** code line data, cash **deposit** details, and the total **deposit** amount to produce a facsimile of a **deposit** slip for a check processing center. The CAT is programmed to compress, encrypt and digitally...

...server 28 which serves to control the check image printer 35, in this case a **MICR** laser printer. As the check images are printed, a single sheet of the check images...

...images, which would ordinarily have been done with the original checks after pickup from the **deposit** locations 13.

Thus, as may be appreciated, in an embodiment of the present invention, a...

...to the central location, the payor bank's desired method of payment is determined. The **depository** bank sends out the instrument for collection as either an ACH item, and ECP entry...

...recreated into a paper form resembling the original paper check, and the paper form is **MICR** encoded. In accordance with the system, a check can be scanned and subsequently presented locally...

...are then scanned, and an image of the check is presented to the customer. A **courtesy amount recognition**, i.e., an electronic

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reading of the amount the customer has written on the check...
...and the amount entered by the customer are the same, the access device accepts the **deposit**. If the amounts are different, the customer re-enters the number. If the amounts still...

...After the check has been accepted and the amounts have been determined to agree, the **ATM /CAT** stamps the **check** "VOID", or prints other appropriate language on the check to show that it is no longer negotiable, and then **deposits** the check into a locked **depository**. The voided checks are picked up periodically by a courier or by a banking institution...

...for further banking activities as further described. Throughout the day, the **ATM/CAT** transmits the **deposited** images to a central location. From these digital images, the central location recreates the check...

...identical to, the original check. In an embodiment of the present invention, the processing facility **MICR** encodes the required information for check processing on the bottom of the check and enters the **MICR** encoded facsimile into the paper presentment flow by sending the reproduced facsimile to a local...

...into a bank's **ATM 251** and processed, as previously described, at block 253. An **MICR** facsimile is then generated at block 255 ...258' for processing by local banks, in this case, San Francisco banks 265'. Specifically, the **depository** bank can send the electronic information directly to the payor bank or to another bank or service provider acting as the **depository** bank's representative to create the **MICR** encoded facsimile. In this embodiment, the time delay for the physical transportation of the piece...

...San Francisco or Houston would be eliminated. Further, the availability of the funds to the **depository** bank from the **deposited** check would no longer be one or two days later, but would, in effect, be...

...that the customer is the depositor of another banking institution. The banking institution for the **ATM /CAT** scans the **deposited check**, and then through a processing center or on-line network, sends the **deposit** record plus the image of the check to the user's bank 269. This function ...

...this disclosure, it is noted that an **ECP** file is an electronic file of the **MICR** -band on the bottom of the check.
Another bank may want a full image file...system can be used to process currency and a typical image deposit flow for both **checks** and **cash** at an **ATM /CAT** is further illustrated in Fig. 8.
Specifically, as illustrated in Fig. 8, at step...

...353.
In an alternative flow of the present invention, Fig. 9 shows a typical image **deposit** flow when a teller station is the point of **deposit**. Specifically at a step 401, a customer asks to **deposit** a check, including possibly receiving cash back, establishing both a **deposit** as well as a customer record. Specifically, the teller follows standard procedures at step 403...

...the teller verifies and corrects the account information, and if appropriate enters "less cash". An **MICR** and image file are created. If the file is complete, at step 411, the file...

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...At that point at a step 413, a further query is made and if the **transfer** is not okay, then the unscanned check is again sent by courier at step 415. On the other **hand**, if this **transfer** is okay, the physical check is then canceled and marked at step 417 and moved into a **deposit** bin at step 419 and later couriered to the back office at step 421, as...ECP, ACH or Image, at 521, 523 or 525.

If the preference is for an **MICR** facsimile at 527, as described previously, a paper facsimile (MEF) is created as a paper...

...may be used, but may also be combined into one entry point for scanning.

The **ATM** is configured to validate **check** items through **MICR** code line and **OCR** software as well as being capable of validating currency **deposit** items. A display permits presentment of the image of each check on the customer display and the machine allows the customer to input check amounts, using **courtesy amount recognition** software to assist as appropriate. It has the capability of printing the transaction record with image of selected elements of the check as well as compile **deposit** information such as **deposit** account number, check courtesy amount, **MICR** code line data, cash **deposit** details (number of notes of each denomination, and total cash), and total **deposit** amount, to produce a facsimile of a **deposit** slip for the **check** processing center. The automatic **teller machine** includes software to compress, encrypt and digitally sign the check for transmission to a secure processing center, and has the capability to store the **deposit** image and information in a recoverable manner until it has been transmitted to and acknowledge...

...is preferably configured to accept personal and business size checks. It is capable of capturing **MICR** line data per banking standards, and is able to reject items, under software control, which do not have recognizable **MICR** code. It preferably captures a gray scale image of both sides of the check with...

...escrow until the customer and ATM software algorithms decide whether to accept the check for **deposit**. Rejected checks may be returned unmarked to the customer under program control. After the acceptance decision is made, programmable **endorsement** and cancellation information is applied on the back of the check with an inkjet printer...

...Tools, Adobe Photoshop and Pegasus Tool Kits. The print server will provide a framework for **MICR** printer management software, and will be connected to the image server through a local area network and to the **MICR** printer either through a local area network, dedicated Ethernet LAN, Centronics or SCSI. The print...

...may include Windows NT 4.0 Server Operating System and printer drivers for the attached **MICR** printer. In addition, Visual Basic or C++ may be used to **transfer** check images and **MICR** code line data either manually or automatically from the image server through Ethernet LAN. The **MICR** code line data is **transferred** to PCL line language and transmitted to the **MICR** printer with print format data and check image file data. A JPEG image file within...

...a page or pages containing the front and back images of reproduced checks for each **deposit** transaction. One side of the page will contain only check front images, and ...accurately to allow the subsequent cutter operation to generate usable reproductions.

For the high speed **MICR** printer, an **MICR** laser printer such as one available from Hewlett Packard under the commercial name HP5000, with **MICR** modifications, can be used to generate paper reproductions of check images. Such a printer is...

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...CLAIMS and display, and the method further comprising storing the scanned at least one of an **instrument** and **cash** in the automatic **teller machine**.

8. The method of claim 4 further comprising recreating the scanned **deposited** instrument into a paper image which is **MICR** encoded.
9. The method of claim 1 further comprising separately entering the amount on the...

...thereon at the first location, and having a secured container region therein for storing scanned **instruments** or **cash** in the automatic **teller machine**.

31. The system of claim 28 wherein said printer is capable of recreating the scanned image into a paper image which is **MICR** encoded.
32. The system of claim 24 further comprising: means for separately entering the amount...third location, and the third location has means for creating the images on paper and **MICR** encodes them for entry into the check processing system or sending the information to a...

12/3,K/3 (Item 3 from file: 348)
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00884189

Document analysis systems and processes
System und Verfahren fur Dokumentenanalyse
Systeme et procede pour l'analyse de documents
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Total word count - documents A + B			10994

...ABSTRACT models to determine the exact type of document and then extracts the relevant fields for **character recognition**. For

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unconstrained documents, through the use of a blackboard architecture which includes a knowledge database...

...identify and locate relevant fields within the document. These fields are then sent for optical **character recognition**.

...SPECIFICATION entered into computers. In addition new services can be offered by automating data extraction from **documents**. As an example, extending Automatic **Teller Machines** (**ATM**) capabilities to include **document** processing would allow customers to **cash** cheques and receive funds back from the ATM. In the retail business there is a...

...and decomposition of unconstrained documents.

The identification of constrained documents has been solved for various **document** types. For example the DP-**ATM** Model 5665 system produced by NCR in Dundee, Scotland, the HITC form identification system, available ...

...exact type of document and then extracts the relevant fields which are sent for optical **character recognition** (**OCR**). For unconstrained documents the system creates information and hypotheses to identify and locate relevant fields within the document. The fields located are then sent for optical **character recognition** (**OCR**).

BRIEF DESCRIPTION OF THE FIGURES OF THE DRAWINGS

Fig. 1 is an overall illustration of...which are informational elements. For example the informational elements for a business cheque include the **signature** line, courtesy amount, legal amount, **MICR** and date.

In the preferred embodiment a TIFF format scanned image is used, grey-scale...

...Coggins, and B.G. Flower, published by Chapman & Hall 1996, ISBN 0-412-61630-0; **Analysis** of Complex and Noisy Cheque **Images**, Proceedings of IEEE International Conference on Image Processing, pp. 316-319, published by IEEE Computer Society Press 1996, ISBN 0-8186-7310; A Neural Network Accelerator for **Image Analysis**, IEEE Micro, vol. 15, number 3, June 1995, published by IEEE Computer Society Press 1995...

...courtesy amount which is shown in figures, the legal amount which is shown in words, **MICR**, date, and **signature** zone. Details of the Document Analysis Means are described below.

In the preferred embodiment of...through files for giro and deposit slips may be accomplished by systems that process constrained **documents** such as the DP-**ATM** Model 5665 produced by NCR in Dundee, Scotland.

For unconstrained documents, the problem is more...may be complete systems, such as the Net32K or field understanding engines such as optical **character recognition** systems.

A control module 250 is required to control the firing or invocation of knowledge...shown in Fig. 12, the model file is broken into zones. These zones include a **signature** zone 1205, **MICR** zone 1210, legal amount zone 1220, courtesy amount zone 1230 and date zone 1240. Each zone contains fields which further identify the zone. For example the **signature** zone contains the following fields: fixed position, type **hand** print, and position 0.65, 0.9, 0.55 and 1.0 (these are representative...

...Xmax: For example given 0,0 as the top left corner of the cheque, the **signature** should be contained in the box formed by the four points (0.55, 0.65...

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...0.9) and (1.0, 0.9). This data is interpreted to mean that the **signature** zone of a personal cheque is a fixed position field, it is **hand** printed and in the box designated by the position field.

The approach used for modeling...

...amount field, field to the right of the legal amount field, field located above the **signature** field. A legal amount field may contain the following attributes: machine print, location in the...

...equivalent to the courtesy amount field, field to left of courtesy amount, field higher than **signature** field. A **signature** zone may contain the following attributes: **hand** print, located in the right bottom area, large field size, field is below the courtesy amount, field below the legal amount. The data zone is a machine print field. The **MICR** zone may contain the following attributes: machine print field, bottom location, long length, numeric data...model file for a business cheque is shown in Fig. 13. These zones include a **signature** zone 1310, an **MICR** zone 1320, a legal amount zone 1330, a courtesy amount zone 1340 and a date zone 1350. The **signature** zone for a business cheque is not in fixed position. It is probabilistic which means...

...may not be found in the location or with the print type specified in the **signature** zone. Because of this uncertainty, confidence values are computed for each zone. For example, if the field found is **hand** print, a confidence value of .3 is assigned. If it is not **hand** print a confidence value of -.5 is assigned. For the position of the **signature** field it should be bounded by the box formed by 0.7, 0.9, 0...

...token is also taken into consideration. If the Net32K box overlaps the box in the **signature** zone then a confidence value of 0.7 is assigned. If the two boxes do...L1, S1, M1). The hypotheses H1 and H2 share the same hypotheses for legal amount, **signature**, and **MICR**, with the only difference being in the courtesy amount zone. Note that there is a... fields from cheques. The knowledge source outputs the results of the legal amount reader.

11. **OCR** Engines. This knowledge source provides an interface to **OCR** engines in order to perform **character recognition**. This knowledge source outputs the results of the invoked **OCR** engine.

12. Contextual Analysis. This knowledge source provides the ability to perform contextual analysis of...returned by Net32K are numbered and enclosed in boxes for ease of reference only.

1. **MICR** Location Knowledge Source - Looks at the Net32K tokens and rules out unlikely candidates (i.e. **hand** print tokens). Takes the likely tokens and compares them against **MICR** zone of the business document model file. Although three tokens were returned by Net32K (14 - 16), this knowledge source puts the tokens together and compares tokens 14-16 against the **MICR** zone in the business document file. These tokens are returned with the highest confidence value courtesy amount, **signature**, **MICR** and legal amount are output.

11. The groupings are sent for optical **character recognition** (**OCR**). If the **character recognition** engine cannot interpret the grouping sent then the grouping with the next highest confidence value...

...CLAIMS lines.

7. The system of any one of the preceding claims, further comprising an optical **character recognition** device for converting the informational data into associated characters.

8. A process for analyzing a...

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12/3,K/4 (Item 4 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
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00621685

Article depositing apparatus

Gerat zum Deponieren von Artikeln

Appareil pour le depot d'articles

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CLAIMS B	(German)	9711W4	1621
CLAIMS B	(French)	9711W4	2007
SPEC B	(English)	9711W4	14812
Total word count - document A			0
Total word count - document B			20078
Total word count - documents A + B			20078

...SPECIFICATION upper surface of the plate 204.

Slot 234 is provided to receive a magnetic ink **character recognition** (MICR) shuttle 90. To this end, portions of the plate 204 defining slot 234 are formed as spaced-apart rails 236 on which MICR shuttle 90 is mounted and can slide. Rails 236 are dimensioned such that the MICR shuttle 90 is flush with the upper surface of the plate 204. As best seen

...are formed to extend beyond the sidewall 206 of the housing 202 to enable the MICR shuttle 90 to move sufficiently towards sidewall 206 such that the operative components of the MICR can magnetically charge or read information from a **deposit** position to that side of the plate.

MICR shuttle 90 is comprised of a housing having slots dimensioned to receive the rails 236. The operative portion of the MICR head is designated 240 in the drawings. Adjacent the MICR head on MICR shuttle 90 a sensor 242 is provided. In the embodiment shown, sensor 242 is a...

...reflective sensor which is capable of detecting objects (i.e. sheet documents) passing thereover. Below MICR shuttle 90, a solenoid 250, best seen in FIG. 11, is mounted below plate 204...FIG. 9. Shaft 362 and

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roller 364 are positioned to be above the track of **MICR** shuttle 90. Roller 364 extends slightly below the lower surface of platen 310 through a...

...16. Gap 380 extends generally from the discharge end 18 of platen 310 to under **MICR** shuttle 90. Beyond **MICR** shuttle 90 to the receiving end 16 of platen 310, belt run 370b generally engages...550e, 550f, 550g.

Shuttle motor 60 is provided to reciprocally move printer shuttle 70 and **MICR** shuttle 90 across the width of platen 310. To this end, a drum 62 is...

...are adjacent, and run parallel to, the direction of movement of printer shuttle 70 and **MICR** shuttle 90. Idler pulleys 66 are mounted to drive shaft 320 to direct the cable therearound. Printer shuttle 70 and **MICR** shuttle 90 fixedly attached to cable 64 so as to move therewith.

To monitor the...and receivers, additional sensors are provided to monitor the relative position of selected components of **deposit** processing module 12. A generally U-shaped module rotation sensor 182, best seen in FIGS...

...edge 532 of sidewall 504. Sensor 182 is operable to monitor the angular position of **deposit** processing module 12 by sensing the position of windows 534 with respect thereto. Conventionally known...

...are also preferably provided to sense a home position for print shuttle 70 and for **MICR** shuttle 90 the home position being adjacent sidewall 104 of housing 102. A sensor 188...

...25 is also preferably provided on print shuttle 70 to sense the edge of a **deposit** for the purpose of locating print shuttle 70 relative to the **deposit** when information is to be printed thereon.

As indicated above, light emitters 264a, 264b, 266a...

...engage components such as motors 40, 50, 60, printer shuttle 70, scanner imager 80 and **MICR** shuttle 90 by flex circuits (not shown) which can flex and bend as **deposit** processing module 12, and various components thereof, move and operate. A portion of the circuit...

...internal control system for the document processing module 12 is shown. The physical operation of **deposit** processing module 12 are basically controlled by a central processing unit 600 which is programmed to control operations of the various components of **deposit** processing module 12 by means of a program stored therein. Central processing unit 600 is...

...to monitor the relative position of the components, as well as to identify and monitor **deposits** placed therein. Central processing unit 600 is connected to the printer within printer shuttle 70 to provide instructions and information to be printed on a **deposit**. Scanner imager 80 is connected to the control processing unit (CPU) of the ATM to...

...for transmission at a later time. Central processing unit 600 is likewise connected to the **MICR** read head to receive information typically present on checks or other similar documents in coded...

...separate decoding processing unit 610 is provided to decode and translate information obtained from a **deposit** to provide information identifiable to central processing unit 600 or to the external database.

Referring...150 and rail section 134a.

Central processing unit 600 is programmed to position the envelope

Search report

deposit below printer shuttle 70 by controlling transport motor 40.
Positioning envelope **deposit** ED below printer shuttle 70 can be accomplished by using the optical sensors, i.e....

...light receivers 116a, 116b and 116c to establish when the leading edge of the envelope **deposit** has reached the discharge end of **deposit** processing module 12. With the envelope **deposit** ED positioned below printer shuttle 70, central processing unit 600 may activate shuttle motor 60 to position print head 70 to a desired location relative to the envelope **deposit** ED. Shuttle motor 60 is operable to move printer shuttle 70 transverse to the path of envelope **deposit** ED by wrapping cable 64 onto drum 62. At this point, it should be noted that operation of shuttle motor 60 also moves **MICR** shuttle 90 along its respective track. In this respect, printer shuttle 70 and **MICR** shuttle 90 move in tandem across platen 310. A proximity sensor (not shown) adjacent one side of **deposit** processing module 12 is used to establish a "home position" for both printer shuttle 70 and **MICR** shuttle 90.

The central processing unit 600 activates pivot motor 50 to rotate **deposit** processing...

...downward position. Shuttle motor 60 is actuated to move printer shuttle 70 (together with the **MICR** shuttle 90) to a position where cam surface 72 on shuttle housing 70 rides up...

...extending from support housing 102 to lift floating plate 120 away from the single document **deposit**.

Plate 120 is lifted away from belt 370 to reduce the friction drive exerted by...of the document **deposit** from shifting past the edge of platen 310.

If a document **deposit** DD is misaligned and the trailing edge of document **deposit** DD is oriented away from side wall 104, the document **deposit** DD is conveyed from upper transport to the lower transport until such trailing edge is over conical roller 344. In this position, the leading edge of the document **deposit** DD would be captured between **MICR** shuttle 90 and transport belt 370, and a major portion of the document would be...

...380 creates a "low friction drive" condition such that when the trailing edge of document **deposit** DD is repeatedly driven over conical rollers 344, the trailing edge is forced into alignment...

...in a manner as described above. In this respect, the leading edge of the document **deposit** DD, which is captured between **MICR** shuttle 90 and transport belt 370, experiences a "high frictional drive" condition which generally maintains the leading end of the document **deposit** in its original position as the trailing edge is conveyed into alignment by conical roller 344.

With respect to the aforementioned aligning process, the relative position of the document **deposit** during alignment is monitored by means of the optical sensors, i.e. emitters 266a, 266b...

...along the discharge end of the transports together with the sensor 242 mounted to the **MICR** shuttle 90.

Once the document **deposit** is aligned along the edge of platen 310, it is then conveyed from the upper...

...22D, again utilizing arcuate surface 432 of gate 410 as a guide. As the document **deposit** DD is driven into the second transport, it passes over **MICR** shuttle 90 wherein the **MICR** head is energized to magnetize the document **deposit** wherein any code number thereon would be magnetized. In this respect, documents such as checks...

...of the check or bill, as part of the bar code information. As the document **deposit** passes over the **MICR** head, it also passes over window 82 of scanner imager 80. As it does so, an image of the downward facing side of the document **deposit** is obtained and conveyed to central processing unit of the ATM via the scanner card for storage in memory, or is immediately **transferred** to external memory at the bank or financial institution. In this respect, transport belt 370 conveys the entire document **deposit** over image scanner 80. When the leading edge of the document **deposit** has reached the optical sensors at the receiving end of lower transport, transport drive motor 40 is reversed to convey the document **deposit** back over the **MICR** head so that the above-identified magnetized, coded information may be removed therefrom. Generally, the...

...on a certain type of document. Central processing unit 600 is programmed to position the **MICR** shuttle 90 initially to a location wherein the coded information would be expected on the document **deposit**. In the event that the coded information is not found where expected, central processing unit 600 causes transport belt 370 to continually reverse itself to pass the document over the **MICR** shuttle 90, while at the same time, causing shuttle motor 60 to relocate **MICR** shuttle 90 along its rails to a position wherein the coded information might be found. In other words, central processing unit 600 is programmed to reposition the **MICR** head to search the document for the coded information. When the appropriate information has been obtained from the document, such information may be immediately **transferred** to the external memory of the financial institution, stored in memory by the central processing...

...aspect of the present invention, apparatus 10 includes means for "duplexing" or inverting a document **deposit** therein. Such feature is particularly applicable when a document **deposit** has been placed into document processing module 12 in an improper orientation, or merely to reorient a document **deposit** so as to enable both sides of the document **deposit** to be scanned or imaged by the **MICR** shuttle 90 or by the image scanner 80. In this respect, FIGS. 23A-23D illustrate...

...for "duplexing" a document within document processing module 12. In this respect, originally a document **deposit** would typically be processed discussed above. In this respect, the document **deposit** would first be "aligned" in a manner as previously described. It would then be conveyed

...to locate and obtain information from a bar code or magnetic code on the document **deposit**. In the event that the document has been inserted improperly into the document processing module, i.e. upside down, the **MICR** head would be unable to locate or read the bar code (which would be facing platen 310). If the **MICR** head is unable to locate or read a bar code, central processing unit 600 would...compartment 720 into the upper transport, as schematically illustrated in FIG. 23D.

With the document **deposit** conveyed back into the upper transport, the optical sensors on the discharge end of document processing module 12 indicate when the trailing end of the document **deposit** has entered the upper transport. Central processing unit 600 then instructs the document processing module 12 to return to the "aligning position" wherein the document **deposit** may be transported from the upper transport to the lower transport in a manner as previously discussed. As will be appreciated, as the document **deposit** is conveyed from the upper transport to the lower transport, the side of the document which was originally facing away from image/scanner 80 and **MICR** shuttle 90 is now facing image/scanner 80 and **MICR** shuttle 90. In this position, it may be magnetically charged and read, or imaged in...

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...discussed. With the appropriate information obtained and after transaction information is printed thereon, the document **deposit** is then conveyed to one of the storage compartments 714, 716, 718, as discussed above...

...invention as heretofore described, thus provides a single document processing apparatus capable of receiving envelope **deposits**, as well as document **deposits** such as checks, utility bills, or other valued notes. More importantly, an apparatus according to...

...present invention can scan, image and print onto one or both sides of a document **deposit** and accomplishes such scanning, imaging and printing, utilizing only one magnetic read head, one image/scanner and one print head. In this respect, the ability to duplex a document **deposit** reduces the necessity of duplicate components.

Moreover, the use of a bi-directional transport as well as a movable **MICR** head and print head enables the present invention to read account code information off documents...

...to the document processing module in any orientation. In addition, the movable shuttles, particularly the **MICR** shuttle 90, enable variable print locations on **deposited** documents to be located and scanned.

With respect to the alignment mechanism, the use of...

...by means of rotation of the document processing module. In addition to processing sheet document **deposits** DD and envelope **deposits** ED, a document processing module 12 according to the present invention is also capable of...

...now to FIGS. 28A and 28B, document processing module 12 is shown in its "envelope **deposit** position." In this position, slot 802 is in registry with **deposit** entry slot 26 in housing facia 22. A rigid or semi-rigid card, which is...card CD could include magnetic information in coded form which could be read by the **MICR** head. Still further, according to the present invention, card CD may be **transferred** from the second transport to the upper transport to print thereon, in a manner similar to that described above to **transfer** sheet document during the duplexing procedure.

In this respect, document processing module 12 would be...

...29B.

A deposit processing device as described above finds advantageous application with a conventional automated **teller machine (ATM)** for processing **checks** and/or utility bills. A conventional ATM would typically include a display monitor having a...

...information from the digital image data can be displayed on the monitor screen of the **ATM**. Specifically, in a **check cashing** procedure, the field showing the amount of the check is preferably displayed for the convenience...

...would be analyzed to determine the amount of the check. Once the amount of the **check** is determined, the **ATM**'s central processor again compares the amount requested by the customer with the amount of...with the check cashing procedure.

A less complex program may be provided wherein the digital **image** data is **analyzed** to determine the number of characters preceding a delimiter character, i.e. the decimal point...

...within the customer's account to overcome any possible shortfall in the amount of the **check**, the **ATM** may authorize **cashing** of the **check**

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for the amount requested by the customer. Thus, the ATM processor could be programmed to...

12/3,K/5 (Item 5 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00540362

Signature verification method.

Unterschriftprüfungsverfahren.

Methode pour la verification de signatures:

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SPEC A	(English)	EPABF1	2486
Total word count - document A			2817
Total word count - document B			0
Total word count - documents A + B			2817

...SPECIFICATION is effected. The customer then keys in the monetary amount of the cheque to be **cashed** and feeds the **cheque** into the **ATM**. **MICR** data on the **cheque** is then read to provide the account number of the drawer of the cheque. The drawer's account number, account balance and file **signature** are accessed from disk storage and visually displayed to the teller on a monitor screen. The drawee's account number, account balance and file **signature** are also displayed on the monitor screen, together with a visual image of the cheque...

...of a comparison of information on the displayed cheque image and retrieved data, including a **signature** comparison, permits or refuses the cheque cashing transaction.

It is an object of the present...

12/3,K/6 (Item 1 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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00748832 **Image available**

SECURITY DOCUMENT AUTHENTICATION

AUTHENTIFICATION DE DOCUMENTS DE SECURITE

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Search report

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DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
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Detailed Description

Claims

Detailed Description

... least a portion of the security image. The controller is programmed to
(i) define an **authentication** constellation within the security **image** ,
wherein the **authentication** constellation defines a set of constellation
pixels, and wherein the constellation pixels are arranged at...an image
printed on a face thereof. The image is defined by a collection of **image**
elements. The **authentication** device comprises an optical imaging
device and a specially programmed controller. The optical imaging device

...at least a portion of the image.

The controller is programmed to (i) define an **authentication**
constellation within the **image** , wherein the **authentication**
constellation defines a set of constellation pixels, and wherein the
constellation pixels are arranged at...

...document. The security image is defined by a collection of security
image elements. The security **image** defines at least one document
authentication scheme.

The document authentication scheme is arranged to provide an indication
of document authenticity. The...a primary indication of document
authenticity. The method comprises the steps of: (i) defining an
authentication constellation within the security **image** , wherein the
authentication constellation defines a set of constellation pixels, and
wherein the constellation pixels are arranged at...includes a collection
of image elements.

The method comprises the steps of: (i) defining an **authentication**
constellation within the **image** , wherein the **authentication**
constellation defines a set of constellation pixels, and wherein the

constellation pixels are arranged at...

...i) defining a security image including a collection of security image elements, wherein the security **image** embodies a predetermined document **authentication** scheme arranged to provide an indication of document authenticity; (i) defining a covert trigger including...A set of security image elements 22 are illustrated schematically in Fig. 3.

The security **image** 20 defines a predetermined document **authentication** scheme that provides an indication of document **authenticity**. For example, the security **image** may be a conventional void pantograph security image, an optically decodable security image, a varying... trigger 40 and the covert trigger 30 may be arranged to define substantially identical graphical **images**. An indication as to document **authenticity** could be gleaned from a comparison of the respective graphical images defined by the overt...indication of document authenticity. Initially, the method of authentication comprises the step of defining an **authentication** constellation 70 within the security **image** 20. The **authentication** constellation 70 defines a set of constellation pixels 72 arranged at predetermined coordinates within the ...available from the RIDIVI Corporation, Waterloo, Ontario. The controller 82 is programmed to define the **authentication** constellation 70 within the security **image** 20 and identify respective occupation characteristics of each of the constellation pixels 72 based on...

Claim

... said security image is defined by a collection of security image elements, wherein said security **image** defines at least one document **authentication** scheme, and wherein said document authentication scheme is arranged to provide an indication of document authenticity; and a covert trigger printed on said **face** of said document, wherein said covert trigger is defined by a collection of trigger elements...

...said security image elements such that said covert trigger is not readily apparent on said **face** of said document.

2. A security document as claimed in claim 1 wherein said covert...said security image is defined by a collection of security image elements, wherein said security **image** defines at least one document **authentication** scheme, and wherein said document authentication scheme is arranged to provide a primary indication of document authenticity, said method comprising the steps of:

defining an **authentication** constellation within said security **image**, wherein said **authentication** constellation defines a set of constellation pixels, and wherein said constellation pixels are arranged at...

...represent a degree of printed matter defined by at least a portion of said security **image**.

21. A method of **authenticating** a security document as claimed in claim 18 wherein a predetermined number of said authentic...

...said security image and at least a portion of a covert trigger defined on said **face** of said security document.

22. A method of authenticating a security document as claimed in...

...each of said constellation pixels is executed by an automated machine.

24. A method of **authenticating** a document including an **image** printed on a **face** of ...defined by a collection of image elements, said method comprising the steps of:

defining an **authentication** constellation within said **image**, wherein said **authentication** constellation defines a set of constellation pixels, and wherein said constellation pixels are arranged at...

...characteristics represent a degree of printed matter defined by at least a portion of said **image**.

27. A method of **authenticating** a security document as claimed in claim 18 wherein a predetermined number of said authentic...

...of said image and at least a portion of a covert trigger defined on said **face** of said security document.

28. A method of authenticating a security document as claimed in...

...of:

defining a security image including a collection of security image elements, wherein said security **image** embodies a predetermined document **authentication** scheme arranged to provide an indication of document authenticity; defining a covert trigger including a...

...includes a background image layer, a message layer, a message layer mask, and a camouflage **image** layer.

31. A device for **authenticating** a security document, said security document including a security image printed on a **face** thereof, wherein said security image is defined by a collection of security image elements, wherein said security **image** defines at least one document **authentication** scheme, and wherein said document authentication scheme is arranged to provide a primary indication of...at least a portion of said security image; and a controller programmed to define an **authentication** constellation within said security **image**, wherein said **authentication** constellation defines a set of constellation pixels, and wherein said constellation pixels are arranged at...

...occupation characteristics based on printed matter defined by at least a portion of said security **image**.

34. A device for **authenticating** a security document as claimed in claim 31 wherein said security document includes a covert trigger defined by a set of covert trigger elements on said **face** of said security document and wherein said controller is programmed to identify said respective occupation characteristics based on printed matter defined by said covert trigger and said security **image**.

35. A device for **authenticating** a security document as claimed in claim 31 wherein selected ones of said authentic occupation...image printed on a face thereof, wherein said image is defined by a collection of **image** elements, said **authentication** device comprising:

an optical imaging device arranged to generate an image signal representative of at least a portion of said image; and a controller programmed to define an **authentication** constellation within said **image**, wherein said **authentication** constellation defines a set of

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constellation pixels, and wherein said constellation pixels are arranged at...

...said security image is defined by a collection of security image elements, wherein said security **image** defines at least one document **authentication** scheme, and wherein said document authentication scheme is arranged to provide a primary indication of...

...at least a portion of said security image; and a controller programmed to define an **authentication** constellation within said security **image**, wherein said **authentication** constellation defines a set of constellation pixels, and wherein said constellation pixels are arranged at...

12/3,K/7 (Item 2 from file: 349)
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00717138

MULTIFUNCTIONAL BANK CARD

CARTE BANCAIRE MULTIFONCTIONNELLE

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Detailed Description

Claims

Detailed Description

... card must perform the following functions:

- 1 identification (customer's identity),
- 2 auarantee (together with **cheques**),
- 3 **ATM** (withdrawal of funds at ATMs)
- 4 payment (at EFTPOS terminals)
- credit (at EFTPOS terminals).

Hitherto...better because he/she will no longer need to go to the bank to withdraw **cash** or collect **cheques** or go to an **ATM** to withdraw **cash**

The merchant will improve the monitoring of goods turnover and will see turnover at cash...

Claim

... the customer enters "2", a 12-instalment credit will be extended, etc.

Search report

This multifunctional hank **car** (I provides multiple savings: bank costs are reduced many times over, reduces card handling and...

12/3,K/8 (Item 3 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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00709591 **Image available**

FINANCIAL TRANSACTION SYSTEM AND METHOD
SYSTEME ET PROCEDE DE TRANSACTION FINANCIERE

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LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM

TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ

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SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

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Detailed Description

English Abstract

...pay bills by mail or in person, without using checks, cash, conventional credit cards, or **money orders**. The system comprises a **cash** -alternative **instrument**, **ATM** and point-of-sale terminals, a databank and system driver, and a network of system...

...persons from any public or private agency, a second component enables persons or entities to **wire transfer** legal tender from almost any remote location, a third component enables participants to engage in...

Detailed Description

... can be used at hundreds of thousands of retail outlets around the world including hotels, **car** rental agencies, and purchases or payments over the telephone and Internet.

The cash-alternative instrument...

...multi-purpose, replacing phone cards and all other single-purpose cards, credit and debit cards, **ATM** cards, **money orders**, travelers' **checks**, and the like. The **cash** -alternative instrument is unlike any other form of instrument currently known by the inventors. One...

...persons from any public or private agency, a second component enables persons or entities to **wire transfer** legal tender from almost any remote location, a third component enables participants to engage in...
diagram of the system of the preferred embodiment of the present

invention including multi-purpose **cash** -alternative **instruments** , **ATM** and point-of-sale terminals, a system driver, and a banking network; FIGURE 8 discloses...present invention; FIGURE 13 discloses a simplified logic diagram for use of a typical **ftmd-transfer** by **wire** or the like in combination with the preferred embodiment of the system of the present ...

...multi-purpose, replacing phone cards and all similar single purpose cards, credit and debit cards, **ATM** cards, **money orders** , travelers' **checks** , and the like. The **cash** -alternative instrument is acquired anywhere in the world from a wide variety of sources, including...

...In one preferred embodiment, acquisition occurs in a similar manner to the way that a **money order** is acquired (see FIGURE 2).

In one preferred embodiment of the present invention, the cash...

...vending-type machine and charged at the point-of-sale terminal. When acquired at an **ATM** -type machine, the **cash** -alternative **instruments** is **dispensed** directly by the **ATM** type machine.

In one preferred embodiment, a security black-out cover is positioned over the...acquired either through vending machines or directly from merchants as payment is made. When the **cash** -alternative **instrument** is acquired at an **ATM** -type machine, the **cash** -alternative **instruments** are charged when **dispensed** by the **ATM**-type machine only after cash has been **deposited** into the **ATM** machine. A paper receipt is optional for record keeping purposes. When a...cash, check, money order, or the like into the account. When acquisition occurs at an **ATM** machine, the **instrument** holder generally pays in **cash** . Typically, a transaction fee is debited at the time of acquisition. Upon registration the available...

...customers. Such services also include credit cards and secured loans (such as home-improvement loans, **car** loans, and first and second mortgages), as the system financial institution deems appropriate. The cash-alternative instrument of the present invention can be used at **ATM** machines to **transfer** money between accounts, particularly when full-service banking options are available.

In another preferred embodiment...alternative instrument is a PVC card, the card is compatible with any point-of-sale, **ATM** , or any other **instrument** reader, and eliminates the need for the instrument holder to submit personal data.

Multiple PIN...instrument is comparable to cash, leaving no paper trail.

Conventional system involve the use of **cash** , **checks** , credit cards, debit cards, **ATM** cards, all of which are replaced ...lottery or sweepstakes bonuses. Many other game formats are available for the promotional purposes.

These **cash** -alternative **instruments** are not limited to **ATM** or debit cards, or any other card in particular. The cash-alternative instrument **dispensing** machine may print a paper receipt upon request at the election of the customer, which...while the cash alternative instrument is used as a method of payment for tickets, food, **car** rentals, etc.

* hotel-casinos - the key provides access to the guest room while the cash...

Search report

12/3,K/9 (Item 4 from file: 349)

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00645601 **Image available**

**AUTOMATED BANKING MACHINE WITH SELF AUDITING CAPABILITIES AND SYSTEM
GUICHET AUTOMATIQUE BANCAIRE AVEC CAPACITE ET SYSTEME D'AUTO- SURVEILLANCE**

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Detailed Description

Claims

Detailed Description

... 467. Devices of this type can be used to cancel and produce electronic
images of **checks** which are **deposited** into an **ATM** machine. The
cancelled **checks** are stored in the machine for later removal by bank
personnel.

Currency notes, travelers checks...are not perfon-ned frequently enough
and the machine runs out of currency or other **documents** .

Other types of automated **banking machines** , such as those that
dispense cash to customer service representatives, have the same
drawbacks as ATM machines. Periodic replenishment of the currency or
other valuable documents that are **dispensed** by the machine must be done
to keep the machine in operation. While such machines speed the cash
dispensing service to the customer, there is a significant cost
associated with segregating, preparing and transporting...a stack.

It is a further object of the present invention to provide an automated

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banking machine that orients **documents** relative to a sheet path while moving such documents at a high rate of speed...

...It is a further object of the present invention to provide a currency recycling automated **banking machine** that identifies **documents** and which returns unidentifiable documents to a customer.

It is a further object of the...

...invention to provide a currency recycling automated banking machine that enables a customer to deposit **documents** into the **banking machine**, and after the **documents** have been identified, to elect whether to **deposit** the documents or to have them returned.

It is a further object of the present invention to provide a currency recycling automated **banking machine** that can identify **deposited documents** regardless of orientation.

It is a further object of the present invention to provide a currency recycling automated **banking machine** that enables selectively storing **deposited documents** in storage areas in the machine.

It is a further object of the present invention to provide a currency recycling automated **banking machine** that enables selectively storing **deposited documents** in removable canisters.

It is a further object of the present invention to provide a currency recycling automated **banking machine** that enables recovery of **documents** stored in storage areas and **dispensing** the documents to customers.

It is a further object of the present invention to provide an automated **banking machine** in which **documents** may concurrently be transported, oriented, stored in storage areas and **dispensed** from other storage areas within the machine.

It is a further object of the present...

Claim

... The courier service information may include data representative of a particular route for an armored **car** or other vehicle through which the canister will be transported. The information may in addition...on canister 628. This may be done at a secure location remote from the automated **banking machines**. Individuals responsible for loading the **documents** in the storage areas indicate the type and denomination of the documents to the memory...which the documents may be later selectively dispensed. The control system then operates the automated **banking machine** to **check** the other storage areas and the corresponding information.

If the automated banking machine determines...documents placed in storage locations may be stored in the memories as well. Alternatively, the **ATM** may reorient **documents** or may segregate documents of the same type in different storage areas based on orientation...documents thereto it may be particularly desirable to verify the amount, type and number of **documents** added.

Automated **banking machines** of preferred embodiments of the present invention are also programmed to have their control system...
...calibration and self-auditing activities will be established by the

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entity operating the machines.

Alternatively **documents** may be added to the **ATM** of the preferred embodiment directly by input through the usual customer interface. Service providers wishing...

...This may involve insertion of identifying data on a card, through a keyboard, through a **biometric** reorder or combinations thereof. Documents may then be inserted to the input/output area and...

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00645587 **Image available**

MULTI-TRANSACTIONAL NETWORK ARCHITECTURE
ARCHITECTURE DE RESEAU MULTITRANSACTIONNELLE

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MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG

US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT

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Detailed Description

Claims

Detailed Description

... dispenser can also dispense non-paper-based multimedia items such as tokens.

The product multimedia **dispenser** 130 does not **dispense** paper-based multimedia items like the cash/multimedia **dispenser** does, but **dispenses** products such as cassette tapes, CD ROMs, laser disks, DVDs, and microchips which have a...

...type of products include audio and video products such as music and videos. The card **dispenser** 140 **dispenses** cards with or without an integral bar code. For example, the card **dispenser** may **dispense** prepaid phone cards. The ATM/credit/debit card reader 150 can read a magstripe, bar...upon the smart card application. An embodiment of the invention may include a Magnetic Ink Character Recognition (MICR) reader 160 which decodes the magnetic ink characters printed at the bottom of checks. The **MICR** reader converts information from checks or utility bills to digitized information which is then used in processing

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the user transaction. The **MICR** reader enables the Super-**ATM** to **cash checks**. The Super-**ATM** contacts the Financial Service Provider (FSP) indicated by the check. If the FSP authorizes the debit from the checking account, then the Super-**ATM** **dispenses** the amount of Money authorized for debit. The Validator/Acceptor 170 validates for acceptance any **deposited** cash and/or multimedia items. **Deposited** cash may be credited towards a bank account, whereas coupons may **deposited** to apply to the purchase of an item such as a theater ticket. In a...

...g. dot-matrix) or thermal receipt printer 180. The multimedia printers 190 may print tickets, **money orders**, coupons, stamps, tokens, utility bills, etc. which are **dispensed** to the ATM user by the multimedia **dispenser**. Printed tickets include tickets for events, for air flights, for the lottery, etc. A multimedia...

...other writing instrument, may also be embedded into the Super-ATM along with an Optical **Character Recognition (OCR)** scanner. The Super-ATM screen may be web enabled wherein the Super-ATM's display...

Claim

... 12. The automated transaction network of claim 10 wherein said sensor comprises a magnetic ink **character recognition** reader.

13. The automated transaction network of claim 10 wherein said sensor comprises a validator...

...pad.

16. The automated transaction network of claim 10 wherein said sensor comprises an optical **character recognition** scanner.

17. An automated transaction network, comprising:

o first service provider responsive ...29. The automated transaction network of claim 27 wherein said sensor comprises a magnetic ink **character recognition** reader.

30. The automated transaction network of claim 27 wherein said sensor comprises a validator...

...pad.

33. The automated transaction network of claim 27 wherein said sensor comprises an optical **character recognition** scanner.

34. An automated transaction terminal, comprising:

a keypad for selecting between a first, second...wherein said sensor comprises a sensor selected from the group consisting of a magnetic ink **character recognition** reader, a validator, a **biometric** system, a **signature** pad, and an optical **character recognition** scanner.

36. A method for performing a transaction with one of a plurality of service...

12/3,K/11 (Item 6 from file: 349)
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00613731 **Image available**

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AN AUTOMATED DOCUMENT CASHING SYSTEM

SYSTEME AUTOMATISE D'ENCAISSEMENT DE DOCUMENTS

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Detailed Description

Claims

Detailed Description

... area or nationwide network. Often, the currency exchange not only has
the profiled customer's **signature** , but the currency exchange agent
often recognizes the customer as being one of his frequent...

...a high volume of payroll checks is being cashed. The currency exchange
competes with the **ATM** machines by **cashing** personal **checks** for its
profiled customers. Most often, a currency exchange will not cash a
personal check...line of the check. In addition, the check has a second
line which is the **courtesy amount recognition** line ("CAR ") which
is written in numerals representing the value of the check. Most checks
also identify...the present invention, there is provided an automated
banking machine system, which performs the usual **ATM** functions but
which additionally **cashes money orders** and checks for the user
without the presence or the assistance of a teller. Additionally, the
preferred and illustrated, automated banking machine system allows the
depositing of cash into the machine and provides additional functions,
such as **transferring** money by **wire** , **depositing** cash into an account
or purchasing end user items from the machine. The preferred and
illustrated machine provides additional functions, such as **transferring**
money by **wire** , paying bills, or purchasing end user items from the
machine. Preferably, several denominations are stored in the machine and
any change due for a given transaction is electronically **transferred**
onto a card thereby reducing the need for small denominations and change.

The cashing of...

...varied, but it usually involves a comparison feature, such as a
comparison of the document **signatures** with a stored **signature** , a
biometric characteristic of the user with a stored **biometric**

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characteristic special to the user, a comparison of the **LAR** and **CAR** amounts, etc. A number of procedures are used including the use of the PIN number...

...validity at the machine to allow the transaction to be completed.

For example, the cursive **signature** as being that of a profiled or qualified user who has inserted his ATM card...

...amount on the cursive legal line on the check and the dollar amount line (the **CAR** line), as well as the bank and account identifications printed in magnetic ink characters on...in FIG. 1; and FIG. 25 is a flow chart of a signature verification and **character recognition** process.

Detailed Description of the Preferred Embodiment As shown in the drawings for purposes of...software control and operations of the machine. As shown in this flow chart, an optical **character recognition** (OCR) scanner scans the document. A magnetic ink (MICR) reader reads the magnetic ink data on the check, which will include the bank's the **CAR** line will be scanned to verify that the check is for the correct amount, in...

...sides of the document are saved in a step 440. In a step 442, the **images** are **analyzed** by amount recognition software of the types supplied by Mitek of San Diego, California, in particular its Quickstrokes Version 2.5 software. Control is **transferred** to that software from step 442 and as may best be seen in FIG. 25...

...files are read in a step 454, which form files include the positions where the **courtesy amount recognition** and where the **signatures** are likely stored in the fields within the document. In a step 456 the scanned...

...458 the neural network contained within the Quickstrokes software recognizes the characters written in the **signature** line as well as the characters written in the **courtesy amount recognition** space and in the amount recognition line. The recognized characters are then evaluated from the...further evaluation. Referring now to FIG. 14 in a step 470, the strings representing the **signature** verification as well as the amount on the document are forwarded to the bank network by the modem 29 for confirmation for payout. If there is no confirmation control is **transferred** to a step 472 causing the document to be ejected from the document slot and...

...In the event that the documents are confirmed in a step 470, the check or **money order** is stacked in an accepted documents bin in a step 478 and confirmation on the...scanners 58 and 60 take images of the front and back of the check. Optical **character recognition** readers read the magnetic ink recognition characters for the bank and for the customer's account. Electronic signals from the image takers 58 and 60 provide information concerning the **signature** for the check, the legal line and the amount written thereon, and the **CAR** line and the amount written thereon, all of which are stored magnetically, in this instance...of opposite sides of the check.

The processor by executing document verification software will then **analyze** the **signature image** and compare it with the profile **signature** of the user. Likewise, the processor, by using the verification software, will also read the cursive legal amount line and the written numerical amount at the **CAR** line, as will be described hereinafter in connection with the document verification software in ...

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with communication to the user's account; through the banking modem, the screen will display "OCR " with a movable bar, as shown in FIG. 16E. The next prompt shown on this...

...in greater detail in connection with check cashing flow chart of FIG. 16A, the cash **dispenser** 30 will then be operated to **dispense** \$40.00 into the cash bin 56, which the user will then remove. As shown in FIG. 16G, the amount of \$40.00 will be **deposited** in the user's account through the banking network; and the receipt printer 50 will print a receipt for the **deposit** of \$40.00.

The cashing of the money order is much like cashing a check...bill was read by the cameras 58 and 60. The magnetic or the other optical **character recognition** information on the bill will be analyzed to connect the payment of \$45.22 to...

Claim

... further comprising means for reading the legal amount line in cursive, and for reading the **courtesy amount recognition** line, and for comparing the same as being for the same amount prior to operating the cash **dispenser** .

3. A system in accordance with Claim 2 further comprising a reader for reading magnetic ink **character recognition** data on the document.

4. A system in accordance with Claim 3 further comprising:

an...1 wherein the document is a check and comprises:

a reader for reading magnetic ink **character recognition** data of a bank on the check; and a communication network having a modem for...

...signature verifier including a reader for reading a cursive signature on the back of a **money order** .

30 35. A **banking machine** in accordance with CLAIMS 1 for paying a bill by the user, comprising:

a bill...an amount on a legal line, which is written in cursive, and for reading a **courtesy amount recognition** line for the amount written thereon.

72. A machine in accordance with Claim 70 wherein...an amount on the legal line written in cursive; and reading an amount from the **courtesy amount recognition** line.

77. A method in accordance with Claim 73 further comprising:

generating an image from...

12/3,K/12 (Item 7 from file: 349).
DIALOG(R) File 349:PCT Fulltext
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00590236 **Image available**

BIOMETRIC CHECK VERIFICATION SYSTEM
SYSTEME BIOMETRIQUE DE VERIFICATION DE CHEQUES
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Search report

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MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ

VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH

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Detailed Description

Claims

Detailed Description

... images of customers, faces, and the processor may compare an image of the customer's **face** from the database of customer information to the image of the customer's **face** produced by the camera to confirm the identity of the customer. The processor may obtain the image of the customer's **face** from the database of customer information based on input signals generated by the input device...

...apparatus may include a second camera that obtains a second image of the customer's **face** , and the processor may compare the two **images** when **confirming** the identity of the customer. The apparatus also may include lights positioned to illuminate the customer's **face** to improve an image obtained by the camera. The **biometric** information also may be the customer's **fingerprint** .

After confirming the identity of the customer, the processor may determine automatically whether to accept...displayed about the check may include an intervention criterion met by the check.

When the **check -cashing** apparatus includes an automated **teller machine** , the **check -cashing** apparatus may be configured to perform banking transactions associated with an account identified by a...unit produces an image of the front and back of the customer's check and **analyzes** the **image** to extract information about the check and to verify the authenticity and amount of the check. The check-cashing unit also verifies the customer's identity using **biometric** information such as an image of the customer's **face** (known as **facial biometrics**). Use of **biometric** information permits customers to perform transactions without providing a membership card or other form of...Fig. 1.

Figs. 6A and 6B are flow charts of a procedure implemented by an **ATM** of the **check -cashing** unit of Fig.

1.

Fig. 7 is a flowchart of a procedure implemented by...or savings account)

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so that the unit 100 also may serve as a traditional automated **teller machine** ("ATM").

The **check -cashing** unit 100 also includes privacy screens 150 that provide the customer with a degree of...

...using the checking unit. Lights 155 are positioned so as to illuminate the customer's **face** in a way that permits the video cameras 125 to produce high quality images.

An...the check reader 130 (step 622)', and the customer inserts the check (step 625). The **check** processing module 315 of the **ATM** 350 scans the **check** to produce images of the front and back of the check, validates the **MICR** ("magnetic ink **character recognition**") code on the check, and reads designated zones of the check (step 630). If the customer has failed to **endorse** the check, as indicated by the image of the back of the check, or has inserted the **check** incorrectly (step 632), then the **ATM** returns the **check** to the customer and prompts the customer to **endorse** the check (if necessary) and to reinsert the check (step 634). If the check has been **endorsed** and properly inserted, the **ATM** 350 then displays an image of the front of the check to the customer (step 635) and validates the contents of the check using optical **character recognition** ("OCR") (step 640). Using the recognized amount of the **check**, the **ATM** then calculates the difference, if any, between the recognized amount of the check and the...

...number or other identification number, the images of the front and back of the check, **MICR** information, information as to whether the contents of the check passed the validation step, the check amount read by **OCR**, the check amount entered by the customer, and the difference, if any, between the two...

...customer to remove any hat, sunglasses, or other items that would obscure the customer's **face** (step 652) and waits for a response from the processor 100. The message may be...

...The image from the second camera 125, though not used for comparison with the stored **image**, is used to **verify** that the **image** from the first camera is an image of the customer rather than an image of...

...identify the customer. The identification software also may compare the image of the customer's **face** with a database of images associated with "bad" customers (i.e., customers who have previously...be continued or cancelled. If the customer has not accepted the transaction (step 671), the **ATM** 350 returns the customer's **check** (step 673). The **ATM** 350 then ends the transaction (step 675) and waits for another customer (step 605). If...

...the customer (step 690) and ends the transaction as noted above. In some instances, the **ATM** 350 may retain the rejected **check**. For example, an operator at the CSC 400 may signal the **ATM** 350 to retain the rejected **check** if the operator determines that the check has been stolen.

Referring again to Fig. 7...number or other identification number, the images of the front and back of the check, **MICR** information, information as to whether the contents of the check passed the validation step, the check amount read by **OCR**, the check amount entered by the customer, and the difference, if any, between the two...the routing number and the account number printed on the check and provided by the **check** processing module of the **ATM**.

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If the server 500 finds the payor in the payor database (step 825), the server...ATM machines. When contacting the CSC, the POS unit indicates whether a transaction is a **check** transaction or a traditional **ATM** transaction. The server at the CSC routes ATM transactions to an **ATM** network provider, and processes **check** transactions as described above.

Other uses to which the system may be put include, but...

Claim

... image of the customer's face, wherein the processor is configured to compare the two **images** when **confirming** the identity of the customer.

8. The apparatus of claim 3, further comprising lights positioned...of the customer is confirmed.

22. The apparatus of claim 1, further comprising an automated **teller machine**, wherein the input device, the **check** reader, and the **cash dispenser** comprise components of the automated teller machine.

23. The apparatus of claim 22, wherein the...the input device, the check reader, and the cash dispenser comprise components of the automated **teller machine**, the **check -cashing** apparatus is configured to perform banking transactions associated with an account identified by a card...and the cash dispenser of the first cash-checking unit comprise components of the automated **teller machine**, the first **check -cashing** unit is configured to perform banking transactions associated with an account identified by a card...

12/3,K/13 (Item 8 from file: 349)
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00572487 **Image available**

APPARATUS AND METHODS FOR COLLECTING VALUE

APPAREIL ET PROCEDE D'ENCAISSEMENT

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Detailed Description

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Detailed Description

... of transaction. The account receivable archive is external to the SAM; as opposed to the **CAR**, the credit for accounts receivable, which may only be a PK protected Archive File (Cryptographically...Command APDU-for T=0 timing - Command + Data sent from an application to the TTL.

CAR Credit for Accounts Receivables - The mechanism, (very similar to the CCR), meant to control account value (generally electronic) received and **transferred** by SAM/SCs. Generally, such value will be handled by a central clearance organization (see...

...TIM, a parking meter, following rules established by the SC issuer, the SAM/SC's **CAR** is decremented. Means and methodology in this document with relation to **transfers** of CCRs are applicable with CARs. However, the motivation for full authentication of the terminal...is immediately decremented by the PM - INC's first two increments of ECASH reducing the **CAR** by the same amount and incrementing the accounts receivables (AR) purse by the same sum...

...increments elapsing before the return of the client with his SC will activate additional incremental **transfers** from the TPMP to the AR purse, and decrements from the entitling **CAR**; when the client returns to retrieve his vehicle, he inserts his smart card; the TPMP...

...from the PM's AR purse, into its own AR purse, decrementing the warden's **CAR** and incrementing the PM's **CAR** by \$16, to return the **CAR** to its maximum entitlement.

When the Warden or RF network connection "duns" the meter, the...FCI.

Floor Limit - an EMV value variable, above which a terminal has the option to **transfer** the negotiation process to the On-Line host Free Access Purse- A client purse for...

...rectify any aberrations, e.g., when a traveler inserts his SC in a TIM, the **CAR** purse to purse protocol will not include the TIMs proving to the SC that the...has the authority to convert a receipt into an increment to X's CCR or **CAR**. This function is typically intended for use by accountants who reconcile receipts with accounting statistics...

...to a company treasurer whose duty is to send CCRs to dispersed \$CASH collectors.

This **signed** request for receipt typically includes proof of X's belonging to the system, and data...

...SAMISC which will enable to convert said receipt once, and only once into CCR or **CAR** (CxR).

RSA Rivest-Shamir-Adelman Method - most flexible and de facto standard PKC for electronic...communication.

TPMP Temporary Purse in Parking Meter- A purse which receives the client's parking **deposit** and **disposes** increments to the account's receivable while client's **car** is parked; holding the client's unspent ECASH; If the "unspent" surplus is returned to...

...purse, any other remainder increments the accounts receivable and

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decrements the entitlement contained in the **CAR** .
Trace - A service giver/terminal's ID string (8 bytes).

Trans. Transaction - A negotiated transmission...operator treasurer 570 preferably provides the agent 590, such as the fuel station or lottery kiosk , a **cheque** for credit for **cash** receivables whose value preferably exceeds the total amount provided to the bank 580 by the...for accounts receivable is lower than a predetermined threshold such as % of its maximum entitlement **CAR** - **MAX**, then (step 640) the meter typically summons a warden, e.g. by means of...

...all transactions performed by the meter and restores his credit for accounts receivable, typically to **CAR** - **MAX** level.

If the present credit for accounts receivable is positive, then (step 670) the...entitlement to collect electronic cash in return for services rendered (maximum credit for accounts receivable -- **CAR** - **MAX**) and between the parking meter's present balance of entitlement is compared to the...

...be equal, then (step 1130) the current balance is restored to, i.e. incremented to, **CAR** - **MAX** level, less the amount of electronic cash presently stored in the parking meter's temporary purse. The warden's entitlement to collect electronic cash, **CAR** - **OPM**, conversely, is decremented by the amount of account collection entitlement which was conferred on...

12/3,K/14 (Item 9 from file: 349)
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00561186 **Image available**

**FINANCIAL TRANSACTION, AUTHORIZATION, NOTIFICATION AND SECURITY APPARATUS
APPAREIL ET PROCEDE DE PROTECTION, AUTORISATION ET/OU NOTIFICATION POUR
DISPOSITIF DE COMMUNICATION SANS FIL ET/OU DE TRANSACTION FINANCIERE**

Patent Applicant/Assignee:

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BOCK Robert Richard, BOCK, Robert, Richard , 123 Cornwall Meadows,
Patterson, NY 12563 , US

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Patterson, NY 12563 , US

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FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN
MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU
ZW GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES
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TG

Publication Language: English

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Fulltext Word Count: 25631

Search report

Fulltext Availability:
Detailed Description

Detailed Description

... or banks. The central processing computer 103, for example, may process and maintain records of **deposits**, withdrawals, **checks cashed**, drafts, **ATM deposits**, **ATM** withdrawals, charges made against an account, credits made to an account, etc., and/or any...of the apparatus 100 commences at step 130 when the is financial transaction and/or **instrument** or **ATM** card is presented to the bank or financial institution employee, representative and/or placed in...and/or cellular telephone owner via transmissions made to, and received at a television, radio, **car** radio, computer and/or other communication device which receives signals transmitted via any suitable communication...
...may be notified by having signals, data and/or information transmitted to their television, radio, **car** radio, computer, etc., in such a manner so as to interrupt the normal operation of...

12/3,K/15 (Item 10 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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00524007 **Image available**

RECORDING MAGNETIC INFORMATION ON TRAVELER'S CHECKS
ENREGISTREMENT D'INFORMATIONS MAGNETIQUES SUR DES CHEQUES DE VOYAGE

Patent Applicant/Assignee:

VISA INTERNATIONAL SERVICE ASSOCIATION

GALLAGHER Thomas

HENRETTY Murdoch

Inventor(s):

GALLAGHER Thomas

HENRETTY Murdoch

Patent and Priority Information (Country, Number, Date):

Patent: WO 9724694 A1 19970710

Application: WO 96US20793 19961230 (PCT/WO US9620793)

Priority Application: US 95581184 19951229

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GE HU IL IS JP KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT
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KZ MD RU TJ TM CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
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Publication Language: English

Fulltext Word Count: 9234

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... One stripe is placed along a bottom edge of the check away from a front **endorsement** region, and a second stripe is placed along a side edge away from a rear **endorsement** region. The magnetic stripes are run through a magnetic character reading device either lengthwise or...

...information in case of damage to either stripe, and for standard check processing as with **MICR** (magnetic ink **character recognition**) data.

United States Patent #5,371,798, granted to McWhortor, discloses a system for enhancing...

Search report

...A financial transaction document, such as a check, is provided with a first band of **MICR** encoded financial information in magnetic ink and a second band of non-magnetic information printed...

...above or below the first band. A magnetic scan sensor is used to read the **MICR** information and an optical scan sensor is used to read the non-magnetic information. Both **MICR** and the non-magnetic information are used to differentiate between properly printed documents and improperly...amount of the check, onto the check card. A person receiving a check card may **cash** it at an **ATM** having an exclusive **check** card read out apparatus. The check card is not a self-identifying cash document. No...

...person receiving a check card to establish whether the check card is fraudulent prior to **cashing** of the **check** card at an **ATM**.

United States Patent #3,363,917, granted to Gunderson et al., discloses an apparatus for...

...throughout the core are oriented to represent information. Dummy pairs are used to prevent counterfeiting. **OCR** (optical **character recognition**) data on the surface of the card is compared with the data from the magnetizable...the document for an optical scanner. The highlighted regions are coded according to function using **OCR**, magnetic ink, or a fluorescent ink omission format, such that a scanning machine may locate...

...correction.

United States Patent #4,921,279, granted to Hanna, discloses a method for printing **MICR** data on a bank check correction sticker in an offset position such that a deep...12

Parallel to the bottom edge of the traveler's check is a region containing **MICR** data 505 printed in magnetic ink. The **MICR** data 505 on the front of the traveler's check is both magnetically and optically ...

...traveler's check after encashment, the traveler's check is passed in front of an **MICR** /**OCR** head for electronic processing of the routing and identifying information encoded in the **MICR** data.

The **MICR** standard for traveler's checks calls for data to be encoded in a 16mm (5/8 inch) clear band at the bottom of the check in an **MICR** format, such as the following VISA traveler's check format for U. S. dollar traveler's checks:

MICR

Position Contents

43 Transit Symbol

34-42 9-Digit Routing and Transit Number 33 Transit...

...Transaction Code The serial number for the traveler's check may be embedded in the **MICR** format above. For example, in one embodiment, a thirteen-digit serial number comprises the contents of positions 19-24 and 26-32 of the **MICR** data.

Figure 6 is an illustration of a rear surface of a traveler's check...of the traveler's check production process. At one stage in the production process, the **MICR** check information is printed on the front **face** of the traveler's check. Frequently, the **MICR** information is captured by an **MICR** reader in a later processing stage to verify the traveler's

Search report

check information for use...

...to a magnetic stripe writing device. A standard magnetic transducer (head) is then used to **transfer** the identifying information into track two of the magnetic stripe. This added step in the...s check provides a means for fulfilling this requirement where none previously existed.

Reading of **MICR** information requires that the **MICR** information region be first magnetized, then read by a sensing means. The **MICR** reading process requires that the document pass extremely close to the **MICR** reading device with little displacement tolerance. **MICR** reading devices are therefore not compatible with the compact, high speed environment of **dispensing** machines. Documents are likely to be damaged or caught in the **MICR** reading device, causing malfunctioning and possible shutdown of a **dispensing** machine. Due to the high volume of service provided by ATM's, shutdown of an ATM machine is highly undesirable.

Unlike in the **MICR** reading process, a magnetic stripe does not need to be magnetized by the reading device prior to information capture. It is therefore possible to equip a **dispensing** machine, such as an ATM, with a magnetic stripe reader. As the traveler's check is **dispensed**, the magnetic stripe passes adjacent to the reading device, and the information encoded in the magnetic stripe is captured. The **dispensing** machine then records the transaction. Via the captured information, the **dispensing** machine is also able to verify the denomination of the traveler's check prior to **transfer** of the traveler's check into the custody of the purchaser.

Further, in response to...purchase of the traveler's check. In block 200, the magnetic stripe on the rear **face** of the traveler's check is encoded with the unique identification code. As stated above...

...the production process of the traveler's check in conjunction with the capturing of the **MICR** data on the front **face** of the traveler's check. In block 201, The traveler's check is purchased

Claim

... in said magnetic stripe comprises the steps of capturing said unique identifying code from an **MICR** strip on one **face** of said cash document; encoding said captured unique identifying code into said magnetic stripe.

5...communication line comprising a telephone line.

16. The apparatus of claim 7 wherein said front **face** further comprises a fourth region containing document identification information as **MICR** data.

17. The apparatus of claim 16 wherein said encoded information comprises said document identification...

12/3,K/16 (Item 11 from file: 349)
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00437990

SYSTEM AND ITS METHOD OF USE FOR ACCEPTING FINANCIAL OVERPAYMENTS
SYSTEME ET SON PROCEDE D'UTILISATION POUR L'ACCEPTATION DE PAIEMENTS
EXCEDENTAIRES

Search report

Patent Applicant/Assignee:

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BURKE Bertram V

Inventor(s):

BURKE Bertram V

Patent and Priority Information (Country, Number, Date):

Patent: WO 9634358 A1 19961031

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IS JP KE KG KP LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG

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IE IT LU MC NL BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 17167

Fulltext Availability:

Detailed Description

English Abstract

...use cash at a point of sale terminal (Figure 1, RTI through RTN),
write a **check**, use an **ATM** machine, or use a credit or debit card. The
POS system is a network composed...

Detailed Description

... use of the invention the IC technology may be incorporated in the
design of a **car** windshield or **car** window to allow the invention to be
accessed under a variety circumstances, i.e., drive...be incorporated in
the design of a key chain device or displayed on windshields or **car**
windows to allow the invention to be accessed under a variety
circumstances, i.e., drive...by applying a determinant to the face amount
or number of account entries, e.g. **checks**, **ATM** withdrawals, credit
and debit drafts.

The rounder system versus the POS system occurs in a...

...have achieved the ability to save every time they spend, regardless of
whether they use **cash**, write a **check**, use an **ATM** machine, use a
credit or debit card.

Referring now to Fig. 8.8, there is...Fig. 8.10A-E.

The face or entry amount means the actual amount of the **check** /**ATM**
withdrawal or credit/debit card charges prior to any rounder activity.
The rounder transaction is...In step 8600 the checking account
transaction is read. The transaction can be a **check** draft, an **ATM**
withdrawal, checking account fee, an interest payment, etc.

In step 8605 the computer gets the...unavailable way for consumers to
save every time they spend, regardless of whether they use **cash**, write
a **check**, use an **ATM** machine, use a credit or debit card.

The invention provides an "open" POS system whereupon...
subscriber/subscribers to create excess funds from account entries
connected with transactions paid for by **check**, **ATM** machine, credit,
or debit card (which can occur at a variety of commercial points: POS
counters, on a person to person basis, by mail, by **wire transfer**, by
telephone, by computer, etc.). The rounder system would apply a
computerized rounder amount to...

Search report

...funds in which the active cooperation of the payee is not needed and when the **face** amount of the payment being tendered is not in excess of the actual purchase price...

12/3,K/17 (Item 12 from file: 349)
DIALOG(R)File 349:PCT Fulltext
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00213072

ELECTRONIC TRANSACTION SECURITY SYSTEM
SYSTEME ELECTRONIQUE DE SECURITE POUR TRANSACTIONS
Patent Applicant/Assignee:

WHITE Peter

Inventor(s):

WHITE Peter

Patent and Priority Information (Country, Number, Date):

Patent: WO 8503787 A1 19850829

Application: WO 85US168 19850205 (PCT/WO US8500168)

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Fulltext Availability:

Detailed Description

Detailed Description

... portable transaction device. The portable transaction device includes a memory and microprocessing capabilities. The particular hardware configuration of the portable device will depend on size and portability requirements. For example...a character font and technique which is machine-readable, such as the magnetic ink format (**MICR**). The locations and format of this type of printing can be found in ANSI specifications ...line mode. Typically, however, the on-line actions are more likely to include withdrawals of **cash** or travelers **check** from an automatic **teller machine**. Another on line activity is the **transfer** of funds from the bank to the memory card 32 if the account balance need...in accordance with the random offset number. When the steps in the subject method are **car**ried out in the above-described order, the transaction in progress will not be affected